

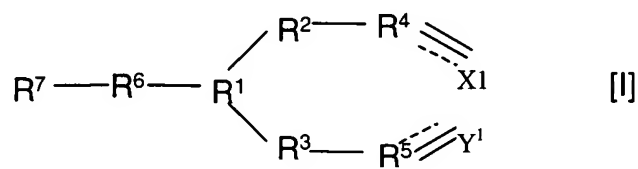
**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-42. Canceled

43. (New) A method of adhering or sealing at least one surface said method comprising

(1) applying to at least one surface, a compound of formula (I)



where  $\text{R}^1$  is selected from a heteroatom or a substituted heteroatom which has electron withdrawing properties and  $\text{R}^6$  is a bond or  $-\text{C}(\text{O})-$ ,  $-\text{C}(\text{O})\text{O}-$ ,  $-\text{OC}(\text{O})-$ ,  $\text{C}(\text{S})$  or  $-\text{S}(\text{O})_2-$ ;  $\text{R}^2$  and  $\text{R}^3$  are independently selected from  $(\text{CR}^{8'}\text{R}^8)_n$ , or a group  $\text{CR}^9\text{R}^{10}$ , -  $(\text{CR}^{8'}\text{R}^8\text{CR}^9\text{R}^{10})-$  or  $-(\text{CR}^9\text{R}^{10}\text{CR}^{8'}\text{R}^8)-$  where  $n$  is 0, 1 or 2,  $\text{R}^{8'}$  and  $\text{R}^8$  are independently selected from hydrogen or alkyl, and either one of  $\text{R}^9$  or  $\text{R}^{10}$  is hydrogen and the other is an electron withdrawing group, or  $\text{R}^9$  and  $\text{R}^{10}$  together form an electron withdrawing group,

$\text{R}^4$  and  $\text{R}^5$  are independently selected from C, CH or  $\text{CR}^{11}$  where  $\text{R}^{11}$  is an electron withdrawing group, and

$R^7$  is selected from hydrogen, an optionally substituted hydrocarbyl group, a perhaloalkyl group or a functional group;

the dotted lines indicate the presence or absence of a bond, and  $X^1$  is a group  $CX^2X^3$  where the dotted line bond to which it is attached is absent and a group  $CX^2$  where the dotted line bond to which it is attached is present,  $Y^1$  is a group  $CY^2Y^3$  where the dotted line bond to which it is attached is absent and a group  $CY^2$  where the dotted line bond to which it is attached is present, and  $X^2$ ,  $X^3$ ,  $Y^2$  and  $Y^3$  are independently selected from hydrogen and fluorine;

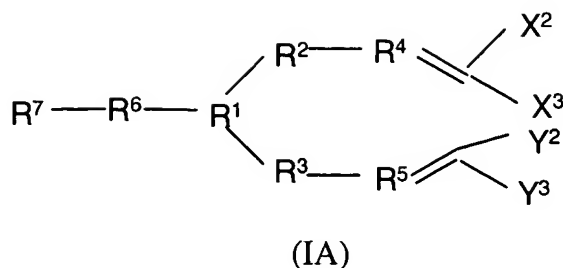
provided that

- i) at least one of (a)  $R^1$  and  $R^6$  or (b)  $R^2$  and  $R^3$  or (c)  $R^4$  and  $R^5$  includes an electron withdrawing group;
- ii) where  $R^2$  and  $R^3$  are both  $CH_2$ ,  $R^4$  and  $R^5$  are both  $CH$ , and  $R^1$  is  $N$ ,  $R^6$  may not be selected from  $C(O)$  or  $-OC(O)-$ ;

and optionally a polymerisation initiator, and

(2) allowing the compounds of formula (I) to polymerize in contact with said at least one surface and optionally a further surface such that the said at least one surface and said optional further surface are adhered or sealed together.

44. (New) A method according to claim 43 wherein the compound of formula (I) is a compound of formula (IA)



where  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $R^7$ ,  $X^2$ ,  $X^3$ ,  $Y^2$  and  $Y^3$  are as defined in claim 43.

45. (New) A method according to claim 43 wherein the compound of formula (I) is polymerised under the influence of radiation or an electron beam or by reaction with a chemical initiator.

46. A method according to claim 45 wherein the compound of formula (I) is polymerisable under the influence of ultra violet or thermal radiation.

47. (New) A method according to claim 46 which comprises a polymerisation initiator which is a photoinitiator.

48. (New) A method according to claim 43 wherein in the compound of formula (I),  $R^2$  and  $R^3$  are groups  $(CR^8R^8)_n$  and  $R^4$  and  $R^5$  are CH groups.

49. (New) A method according to claim 43 where  $R^1$  is selected from nitrogen,  $N^+R^{12}(Z^{m-})_{1/m}$ ,  $S(O)_pR^{13}$ , B, or  $P(O)_qR^{14}$  where  $R^{12}$ ,  $R^{13}$  and  $R^{14}$  are independently selected from hydrogen or hydrocarbyl, Z is an anion of valency m, p is 0, 1 or 2, and q is 0, 1, 2 or 3.

50. (New) A method according to claim 49 where  $R^1$  is a  $N^+R^{12}(Z^{m-})_{1/m}$  group.

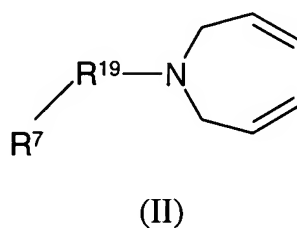
51. (New) A method according to claim 49 where Z is halogen.

52. (New) A method according to claim 49 where  $R^{12}$  is alkyl.

53. (New) A method according to claim 43 where  $R^6$  is a group  $-C(O)O-$  or  $-OC(O)-$ .

54. (New) A method according to claim 43 wherein  $R^1$  is nitrogen,  $R^6$  is  $-C(O)-$ ,  $-C(S)-$  or  $-S(O)_2-$ .

55. (New) A method according to claim 43 where the compound of formula (I) is a compound of structure (II)



where  $R^7$  is as defined in claim 43 and  $-R^{19}-$  is  $C(S)$  or  $S(O)_2$ .

56. (New) A method according to claim 43 where  $R^2$  and  $R^3$  include an electron withdrawing group.

57. (New) A method according to claim 56 where at least one of  $R^2$  or  $R^3$  include electron withdrawing groups  $R^9$  and  $R^{10}$ .

58. (New) A method according to claim 57 wherein  $R^9$  and  $R^{10}$  together form an oxo group.

59. (New) A method according to claim 43 wherein  $R^7$  comprises a hydrocarbyl group optionally substituted by a functional group.

60. (New) A method according to claim 43 wherein  $R^7$  includes an unsaturated moiety.

61. (New) A method according to claim 60 wherein the unsaturated moiety is an aryl or alkenyl group, or a carbonyl substituent.

62. (New) A method according to claim 59 wherein  $R^7$  is an optionally substituted alkyl, alkenyl, alkynyl or aryl group.

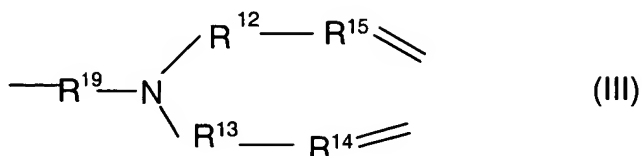
63. (New) A method according to claim 62 wherein  $R^7$  is substituted by halogen, carboxy or salts thereof or acyloxy.

64. (New) A method according to claim 59 where  $R^7$  is a perhaloalkyl group which comprises from 1 to 3 carbon atoms.

65. (New) A method according to claim 64 where  $R^7$  is a perhalomethyl group.

66. (New) A method according to claim 59 where  $R^7$  is a dialkenyl substituted amide.

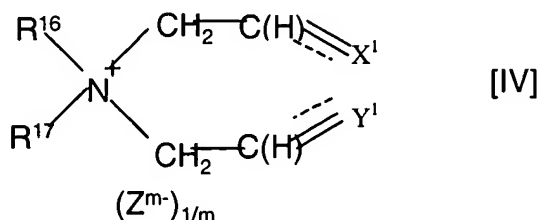
67. (New) A method according to claim 66 wherein the amide is of sub formula (III)



where  $R^{19}$  C(s) or S(O)<sub>2</sub>,  $R^{12}$  and  $R^{13}$  are selected from groups defined above for  $R^2$  and  $R^3$  in relation to formula (I) and  $R^{14}$  and  $R^{15}$  are selected from groups defined above as  $R^3$  and  $R^4$  in relation to formula (I).

68. (New) A method according to claim 67 where  $R^{12}$  and  $R^{13}$  are  $-\text{CH}_2-$  or  $-\text{CH}_2\text{CH}_2-$  groups and  $R^{14}$  and  $R^{15}$  are  $-\text{CH}-$  groups.

69. (New) A method according to claim 43 wherein the compound of formula (I) is a compound of formula (IV)



where Z is an anion of valency m, the hydrogen atoms in bracket are absent when the dotted lines represent the presence of a bond, and  $R^{16}$  and  $R^{17}$  are independently selected from hydrogen and hydrocarbyl optionally substituted with hydroxy.

70. (New) A method according to claim 69 wherein  $R^{16}$  and  $R^{17}$  are selected from alkyl, hydroxyalkyl and alkenyl.

71. (New) A method according to claim 70 wherein  $R^{16}$  and  $R^{17}$  are prop-2-enyl or hydroxyalkyl.

72. (New) A method according to claim 71 wherein hydroxyalkyl is a group of formula  $-\text{C}((\text{CH}_2)_d\text{OH})_a(\text{H})_b$  where a is an integer of from 1 to 3 and b is 0 or an integer of 1 or 2 provided that  $a+b$  is 3, and d is an integer of from 1 to 6.

73. (New) An article which includes at least two surfaces which are adhered together by means of a compound of formula (I) as defined in claim 43 which has been polymerised.

74. (New) An article according to claim 73 wherein the surfaces comprise glass or metal surfaces or a mixture of these.

75. (New) An article according to claim 73 wherein the polymerised compound of formula (I) provides an electrically conducting layer.

76. (New) A biomedical adhesive which comprises a biocompatible compound of formula (I) as defined in claim 43.

77. (New) A sealant which comprises a compound of formula (I) as defined in claim 43.

78. (New) A sealant which comprises a a biocompatible compound of formula (I) as defined in claim 43.